IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1(Original).   A method of implementing an n-th order IIR filter which comprises the steps of:
providing an IIR filter of order less than n; and
operating said IIR filter of order less than n on a time-sharing basis a plurality of times
such that said plurality of times multiplied by the order of said IIR filter of order
less than n is equal to or greater than n.

2(Original).   The method of claim 1 wherein said plurality of times multiplied by said
order is equal to n.

3 (Currently Amended).   The method of claim 1 further including providing a
decoder coupled to ~~said~~ an input terminal of the IIR filter.

4 (Currently Amended).   The method of claim 2 further including a providing
decoder coupled to ~~said~~ an input terminal of the IIR filter.

5 (Currently Amended).   An ~~implementstion~~ implementation of an n-th order IIR
filter which comprises:
an IIR filter of order less than n; and
means to operate said IIR filter of order less than n on a time-sharing basis a plurality of
times such that said plurality of times multiplied by the order of said IIR filter of
order less than n is equal to or greater than n.

6(Original).   The implementation of claim 5 wherein said plurality of times multiplied
by said order is equal to n.

7(Currently Amended). The implementation of claim 5 further including a decoder
coupled to ~~said~~ an input terminal of the IIR filter.

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8(Currently Amended). The implementation of claim 6 further including a decoder coupled to ~~said~~ an input terminal of the IIR filter.

9 (New). A method according to claim 1, wherein a number of clock cycles required for computing an output of the IIR filter is independent of filter coefficients of the IIR filter.

10 (New). The implementation of claim 5, wherein a number of clock cycles required for computing an output of the IIR filter is independent of filter coefficients of the IIR filter.